

02-26-04

1631 \$

Docket No. VPI/95-09 DIV

THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Applicants : David M. Armistead, et al.  
Application No.: 09/431,469 Confirmation No.: 8756  
Filed : November 1, 1999  
For : MOLECULES COMPRISING A CALCINEURIN-LIKE  
BINDING POCKET AND ENCODED DATA STORAGE  
MEDIUM CAPABLE OF GRAPHICALLY DISPLAYING  
THEM  
Group Art Unit : 1631  
Examiner : Marjorie A. Moran

New York, New York  
February 24, 2004

Hon. Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Express Mail Label Number EV133110633US.

Date of Deposit February 24, 2004

I hereby certify that this paper/fee is being deposited with the United States Postal Service "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Lillian Garcia

Enclosures:

- (1) Transmittal Letter (in dupl.);
- (2) Supplemental Information Disclosure Statement;
- (3) Form PTO-1449;
- (4) Check for \$180.00; and
- (5) Postcard.



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New York, New York  
February 24, 2004

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL LETTER FOR  
SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Transmitted herewith are a Supplemental  
Information Disclosure Statement and Form PTO-1449 (in  
duplicate) pertaining to the above-identified application.  
This Statement is submitted more than three months from the  
application filing date and after the mailing date of the  
first Office Action on the merits, but before the mailing  
date of either a final action under 37 C.F.R. § 1.113, or a  
notice of allowance under 37 C.F.R. § 1.311.

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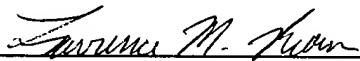
01 FC:1806

180.00 OP

In accordance with 37 C.F.R. § 1.97, the fee of \$180, as set forth in 37 C.F.R. § 1.17(p), is required and a check for said amount is included herewith.

The Director is also hereby authorized to charge payment of any additional fees required in connection with the accompanying Supplemental Information Disclosure Statement, or credit any overpayment, to Deposit Account No. 06-1075. A duplicate copy of this letter is transmitted herewith.

Respectfully submitted,

  
James F. Haley, Jr. (Reg. No. 27,794)  
Li Su (Reg. No. 45,141)  
Attorneys for Applicants  
Lawrence M. Brown (Reg. No. 52,660)  
Agent for Applicants  
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1251 Avenue of the Americas  
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Tel.: (212) 596-9000  
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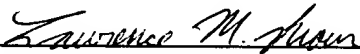
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FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
VPI/95-09 DIVSERIAL NO.  
09/431,469SECOND SUPPLEMENTAL INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

APPLICANTS

David M. Armistead et al.

FILING DATE

November 1, 1999

GROUP

1631

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,833,233	5/23/89	Carter	530	363	8/20/87
	5,025,388	6/18/91	Cramer, III	364	496	8/26/88
	5,331,573	7/19/94	Balaji	364	496	12/14/90
	5,353,236	10/4/94	Subbiah	364	499	4/23/92

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO94/25860	11/10/94	PCT	G01N	24/00		

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

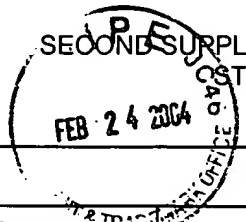
EXAMINER INITIAL	
	Andrus, M.B. and Schreiber, S.L., "Structure-Based Design of an Acyclic Ligand That Bridges FKBP12 and Calcineurin" <u>J. Am. Chem. Soc.</u> , 115, pp. 10420-10421 (1993).
	Barford, D. and Keller, J.C., "Co-crystallization of the Catalytic Subunit of the Serine/Threonine Specific Protein Phosphatase 1 from Human in Complex with Microcystin LR", <u>J. Mol. Biol.</u> , 235, pp. 763-766 (1994)
	Bierer, B.E. et al., "Cyclosporin A and FK506: Molecular Mechanisms of Immunosuppression and Probes for Transplantation Biology" <u>Curr. Opinion in Immunology</u> , 5, pp. 763-773 (1993).
	Caffrey, M.V. et al. "Synthesis And Evaluation Of Dual Domain Macrocyclic FKBP12 Ligands" <u>Bioorg. Med. Chem. Lett.</u> , 4, pp. 2507-2510 (November, 1994).
	Campbell, I.D. and Dwek, R.A., "Diffraction" in <u>Biological Spectroscopy</u> , The Benjamin/Cummings Publishing Company, Menlo Park, CA, pp. 299-326 (1984).
	Griffith, J.P. et al., "X-Ray Structure of Calcineurin Inhibited by the Immunophilin-Immunosuppressant FKBP12-FK506 Complex", <u>Cell</u> , 82, pp. 507-522 (1995)
	Guerini, D. and Klee, C.B., "Cloning of Human Calcineurin A: Evidence for Two Isozymes and Identification of a Polyproline Structural Domain", <u>Proc. Natl. Acad. Sci. USA</u> , 86, pp. 9183-9187 (1989)
	Holt, D.A. et al., "Design, Synthesis, and Kinetic Evaluation of High-Affinity FKBP Ligands and the X-ray Crystal Structures of Their Complexes with FKBP12" <u>J. Am. Chem. Soc.</u> , 115, pp. 9925-9938 (1993).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

**EV133110633US**

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VPI/95-09 DIV	SERIAL NO. 09/431,469
 SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANTS David M. Armistead et al.	
		FILING DATE November 1, 1999	GROUP 1631
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
EXAMINER INITIAL			
	Hubbard, M.J. and Klee, C.B., "Functional Domain Structure of Calcineurin A: Mapping by Limited Proteolysis", <u>Biochemistry</u> , 28, pp. 1868-1874 (1989)		
	Kajihara, A. et al., "Protein Modelling Using a Chimera Reference Protein Derived From Exons" <u>Protein Eng.</u> , 6, pp. 615-620 (1993).		
	Kissinger, C.R. et al., "Crystal Structures of Human Calcineurin and the Human FKBP12-FK506-Calcineurin Complex", <u>Nature</u> , 378, pp. 641-644 (1995)		
	Kunz, J. and Hall, M.N. "Cyclosporin A, FK506 and Rapamycin: More Than Just Immunosuppression" <u>TIBS</u> , 18, pp. 334-338 (1993).		
	Sharma, R.K. and Wang, J.H., "Calmodulin and Ca <sup>2+</sup> -Dependent Phosphorylation and Dephosphorylation of 63-kDa Subunit-Containing Bovine Brain Calmodulin-Stimulated Cyclic Nucleotide Phosphodiesterase Isozyme" <u>J. Biol. Chem.</u> , 261, pp. 1322-1328 (1986).		
	Sträter, N. et al., "Crystal Structure of a Purple Acid Phosphatase Containing a Dinuclear Fe(III)-Zn(II) Active Site", <u>Science</u> , 268, pp. 1489-1492 (1995)		
	Uhlin, U. et al., "Crystallization and Crystallographic Investigations of Ribonucleotide Reductase Protein R1 from <i>Escherichia coli</i> " <u>FEBS Lett.</u> , 336, pp. 148-152 (1993).		
	Villafranca, J.E. et al., "Protein Serine/Threonine Phosphatases", <u>Current Opinion in Biotech.</u> , 7, pp. 387-402 (1996)		
	Wilson, K.P. et al. "Comparative X-ray Structures of the Major Binding Protein for the Immunosuppressant FK506 (Tacrolimus) in Unliganded Form and in Complex with FK506 and Rapamycin" <u>Acta Cryst.</u> , D51, pp. 511-521 (July, 1995).		

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Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(c),  
applicants, through their attorney, make of record the  
following documents\*:

United States Patents

<u>Inventor</u>	<u>Serial No.</u>	<u>Issue Date</u>
Carter	4,833,233	May 23, 1989
Cramer III	5,025,388	June 18, 1991
Balaji	5,331,573	July 19, 1994
Subbiah	5,353,236	October 4, 1994

\* Pursuant to 37 C.F.R. § 1.98(d), the documents cited herein are not enclosed because they were submitted with applicants' May 22, 1996 and February 20, 1997 Information Disclosure Statements in United States application Serial No. 08/512,815 (now United States patent 5,978,740), from which the present application claims priority under 35 U.S.C. § 120. Each of the cited documents is listed in the enclosed Form PTO-1449. Applicants will provide copies of these documents, upon the request of the Examiner.

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